Zygospores are produced rather often in maize-meal agar tube cultures of *Basidiobolus meristosporus* through conjugation of segments resulting from median division of a globose or of an elongated conidium (Fig. 2, X). In instances where an elongated conidium serves as parent, reproductive units of bizarre design (Fig. 2, Y, Z) are brought into being. Except for their greater irregularity in outward shape and their somewhat smaller size the zygospores of conidial origin appear similar to those of mycelial origin, sometimes being filled with coarsely granular protoplasm (Fig. 1, Z, a, b; Fig. 2, U, Y) and at other times containing granular protoplasm interspersed with many small reserve globules (Fig. 1, Z, c: Fig. 2, T, V, W, Z). A mature zygospore in its resting state appears to contain only a single nucleus, so that the presence of two nuclei (Fig. 2, Y) indicates either an early immature state or a late after-ripened state prior to germination.

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ZOOLOGY.—*The genus* Ogyrides *(Crustacea: Caridea) in North Carolina.*

Austin B. Williams, University of North Carolina Institute of Fisheries Research, Morehead City, N. C. (Communicated by Fenner A. Chace, Jr.)

In 1879 J. S. Kingsley described a small caridean shrimp, *Ogyris alphaerostris*, from the eastern shore of Northampton County, Va. He based his description on a single specimen that was in poor condition. Hay and Shore (1918) redescribed the species on the basis of another specimen, which was collected near Beaufort, N. C. They placed this aberrant genus in a family of its own, setting aside previous assignments to the families Hippolytidae and Alphaeidae apparently unaware of a change in the generic nomenclature. The genus *Ogyris* was proposed by Stimpson (1860) on the basis of an oriental species, but Stebbing (1914) found this name to be preoccupied and proposed the name *Ogyrides* to supplant it. The family status of the group remains undecided.

Two species of *Ogyrides* have been found in North Carolina in the past three years. One of these is apparently *O. alphaerostris* (Kingsley). The second is different from any known species of *Ogyrides* and is described herein as a new species. Unfortunately, the status of the new species depends upon a clear definition of Kingsley's species, and circumstances make such a definition difficult.[1]

Neither Kingsley's description nor the accompanying figure exactly agrees with either of the species considered here. Kingsley did not mention any spines on the dorsal surface of the carapace, whereas both of the species treated here possess such spines. His figure shows the blade of the antennal scale extended as a small distal lobe instead of tapering toward the terminal spine as in both of the North Carolina species. This figure does not exactly fit the short description, and moreover, the type (an ovigerous female formerly housed at Union College, Schenectady, N. Y., and now at the U. S. National Museum) almost

[1] For many suggestions and for the historical information I am indebted to Dr. Fenner A. Chace, Jr., and Dr. L. B. Holthuis. W. A. Van Engel gave information on the type locality of *O. alphaerostris*.

certainly belongs to the same species as the one described below.

This "type" specimen has a dubious history. It was probably identified by Kingsley as *O. alphaerostris*, and he stated that there was but one specimen in the collection. The specimen was sent to Coutière in Paris when he was working on alphaeids. The locality label is in another handwriting and may have been written on the assumption that it was the type specimen. A slip in the vial bears the number 417; Kingsley gave the catalogue number of the type of *O. alphaerostris* as 407. The circumstantial evidence is strong that this specimen is the type, but Kingsley's statement that this species differs from the genotype *O. orientalis* (Stimpson) in lacking a carina on the carapace leads to doubt as to the validity of this specimen as the type.

Hay and Shore did not have access to the type of *O. alphaerostris* when they made their redescription, for at that time it was in the hands of Coutière. Their description and figures clearly show a single movable spine on the dorsal surface of the carapace. This and other characters described by them are shown by 35 specimens of *Ogyrides*, mostly juveniles, now available for study from the vicinity of Beaufort, N. C.

From these facts two conclusions may be drawn. First, there are two species of *Ogyrides* on the east coast of the United States. One was described and inadequately figured by Kingsley; the type was lost and a new type was designated. Unfortunately, the new type belonged to an unrecognized and undescribed second species. Second, there are three species of *Ogyrides* on the east coast of the United States: (a) One was described and figured by Kingsley, and subsequently the type was lost. The species has not been rediscovered. (b) A new type was designated for Kingsley's species by accident, but unfortunately the specimen chosen belonged to an unrecognized and undescribed second species. (c) Hay and Shore referred their redescription to Kingsley's name *alphaerostris*, but in reality they were describing a third form which is fairly common in the Beaufort, N. C., area.

The matter will not be settled until topotypes of Kingsley's species are collected and studied. For the present it seems permissible to refer Kingsley's and Hay and Shore's species to the name *alphaerostris* on the basis of circumstantial evidence. *O. alphaerostris* in the Beaufort region attains a slightly larger size than the species described below, and this larger size agrees with the total length measurement given by Kingsley. The original description of the carapace more nearly fits that of Hay and Shore's species than it does the form herein described. *O. alphaerostris* in the Beaufort region has invariably been taken near Beaufort Inlet in water with a high salinity (above 25‰). The type locality for the species seems to be somewhat like the Beaufort Inlet region in this respect.

Ogyrides limicola, n. sp. Fig. 1

Description.—Rostrum short, depressed, equilaterally triangular; postrostral carina with 11 teeth, flanked on each side by row of setae extending to rostrum tip; eyestalks long, lightly setiferous dorsally and mesiodorsally, narrowest in middle, exceeding antennular peduncles by approximately 2½ times corneal length; antennal

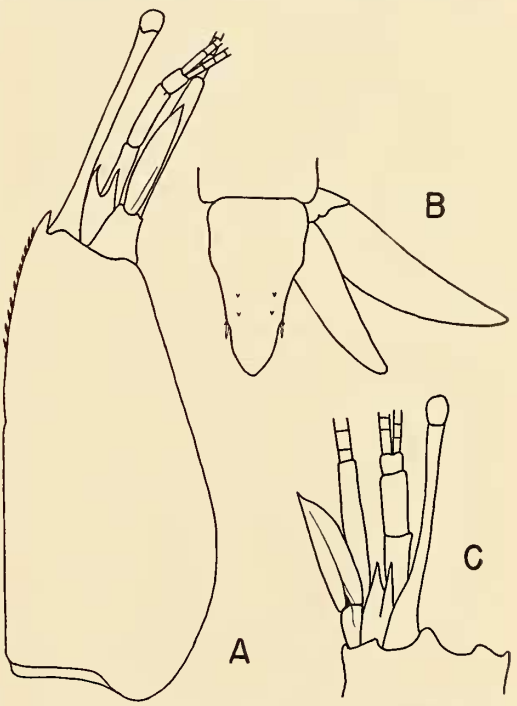

FIG. 1.—*Ogyrides limicola*: (a) Carapace and anterior appendages, lateral view; (b) terminal segment appendages, dorsal view; (c) anterior appendages and portion of carapace, dorsal view. Approximate magnification ×11.

and antennular peduncles nearly equal in length, second antennular segment three times as long as third segment; stylocerites terminating in two strong acuminate spines of nearly equal length; antennal scales and second segment of antennular peduncles reaching nearly same level distally, scales evenly rounded mesially, three times longer than greatest width, greatest width in basal half; third maxillipeds when extended exceeding eyestalks; pterygostomian area broadly obtuse; first legs exceeding midlength of antennal peduncles by full length of chelae; fingers of chelae pointed, agape when closed; telson with anterior pair of spines placed well behind lateral prominences; uropods with exopods slightly falciform, lateral borders nearly straight; telson with three horny ridges at proximolateral corners ventrally and uropods with an interlocking horny eminence on basal segment dorsally.

Types.—The holotype (an ovigerous female, U.S.N.M. no. 96675) and a series of 14 paratypes, as well as 11 other specimens, have been deposited in the U. S. National Museum. A second series of nine paratypes has been placed in the Museum of Comparative Zoology at Harvard University. The carapace length of the holotype is 5¼ mm, and the total length from tip of rostrum to tip of telson is 16 mm.

Type locality.—Mouth of Far Creek at Engelhard, Hyde County, N. C. The creek at this locality is a shallow mud-bottomed estuarine stream which is not subject to periodic tides. The depth varies from 1 to 8 feet. The holotype was taken from the channel near the white light beacon.

Variations.—The chief individual differences observed in this species are the variable number of spines on the postrostral crest (11 in the illustrated specimen, 8–14 in other specimens), and variations in the lengths of the stylocerite spines.

Color of females (from females at type locality, May 17, 1954).—General body structure colorless, clear, internal organs visible, gut dark, hepatopancreas light brown. Eyestalks, antennal and antennular peduncles, and distal portions of anterior appendages with red and yellow spots. Uropods and sixth segment of abdomen with scattered red spots. Ovigerous females with yellow-green (chartreuse) colored eggs on swimmerets. One small female, apparently not completely spawned out, with chartreuse colored ova inside ovary; these ova smaller than external eggs.

Relationships.—This species seems to be most closely related to *Ogyrides yaquiensis* Armstrong (1949), differing from it chiefly in having shorter eyestalks and antennal peduncles.

Specimens examined.—Thirty-five as follows: North Carolina: *Carteret County:* Newport River Narrows approximately 4 miles northwest of Morehead City; White Oak River, near mouth; Adams Creek near mouths of Jonaquin and Cedar Creeks; *Hyde County:* Far Creek at Engelhard; west side of upper Wysocking Bay; *Onslow County:* Hall Creek, tributary of Queen Creek.

A few specimens were not properly labeled when collected. They are known to come from some of the Carteret County estuaries listed above and from South River, Carteret County, N. C.

Remarks.—Ogyrides limicola has invariably been found on (or in) the bottom of muddy estuarine streams. The specimens were collected with a small beam trawl equipped with a bag and codend made of ¼-inch bar mesh. A tickler chain was used to stir the bottom ahead of the net. The shrimp collected could have come from the surface of the mud or from shallow burrows in the surface layer of mud. The length of the eyestalks indicates that the animals may live in shallow burrows with only the tips of the eyestalks projecting above the surface. The paucity of specimens taken in over 600 collections from estuaries further indicates that the form is a burrower and may have a light population density. The Hyde County localities show the greatest population densities.

The collections of *O. limicola* have been made in a bottom salinity range of 9–31‰. Samples were taken throughout the year at most of the localities listed, but *O. limicola* has been collected only in February and from April to September. Ovigerous females are known to occur from May to September.

The chief crustacean associates found with *O. limicola* are juveniles of *Penaeus setiferus, P. duorarum, P. aztecus,* and *Callinectes sapidus.*

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ZOOLOGY.—*Notes on the amphipod crustacean* Maeroides thompsoni *Walker.* CLARENCE R. SHOEMAKER, Smithsonian Institution.

A. O. Walker in 1898 described a species of amphipod, *Maeroides thompsoni*, from two males, not fully mature, from Puget Sound, Wash., creating the genus to receive it. It is now known that the male of this species exhibits marked changes in some of its characters as growth advances toward full maturity. For this reason Walker's species appears to have been overlooked, and its immature stages have been at times described as distinct species. It is a widely distributed species and has been recorded from Puget Sound down to the Gulf of California.

T. R. R. Stebbing in 1899 transferred Walker's species to the genus *Gammaropsis*. In 1904 S. J. Holmes described it as a new species, *Gammaropsis tenuicornis*, from Puget Sound. T. R. R. Stebbing in 1906, in Das Tierreich, placed Walker's species in the genus *Eurystheus*. In 1913 Vinnie R. Stout described it from Laguna Beach, Calif., as *Fimbriella robusta*, making the new genus for it. C. R. Shoemaker in 1916 described it as a new species, *Podoceropsis concava*, from Venice, Calif. In 1931 Shoemaker redescribed and figured the fully mature male of *Eurystheus tenuicornis* (Holmes), giving its geographical range, and making *Podoceropsis concava* a synonym of it. A. L. Alderman, in 1936, recorded *Eurystheus tenuicornis* (Holmes) from Moss Beach, San Mateo County, Calif. In 1942 Shoemaker recorded *Eurystheus tenuicornis* (Holmes) from Magdalena Bay, Lower California.

It now appears that *Gammaropsis tenuicornis* Holmes, 1904, *Fimbriella robusta* Stout, 1913, and *Podoceropsis concava* Shoemaker, 1916, are synonyms of the earliest species, *Eurystheus thompsoni* (Walker), 1898.

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ORNITHOLOGY.—*Description of a new chipping sparrow from Canada.* HARRY C. OBERHOLSER, Cleveland, Ohio.

Several years ago, in the course of a survey of the races of *Spizella passerina* to determine those that occur in Texas, a new Canadian form seemed worthy of recognition. This is now put into print, particularly at the request of a prominent ornithologist of Canada.

Spizella passerina boreophila, n. subsp.

CANADIAN CHIPPING SPARROW

Subspecific characters.—Similar to *Spizella passerina passerina*, but larger, and ground color of upper surface, except pileum, paler, more grayish, near drab. Like *Spizella passerina*